

16. (New) The circuit of claim 2, wherein the feedback means is coupled between an output of the output chopper and an input of the amplifier.

17. (New) A circuit comprising:

an amplifier producing a DC-offset and noise and having at least two differential input nodes and at least two differential output nodes;

first coupling means for alternately coupling first and second input terminals to said at least two differential input nodes of the amplifier;

second coupling means for alternately coupling said at least two differential output nodes of the amplifier to first and second output terminals, wherein said first and second coupling means are adapted for reducing the DC-offset and noise produced by the amplifier; and

feedback means adapted for further reducing the DC-offset produced by the amplifier.

Remarks

Favorable reconsideration of this application is requested in view of the following remarks. For the reasons set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The Office Action mailed on April 24, 2002 indicated that claims 4-7 and 12-14 are allowed, claim 8 stands objected to for an informality; claims 1, 2 and 8-10 stand rejected under Section 102(b) as being anticipated by *Simo*es (U.S. Patent No. 4,430,622); and claims 3 and 11 stand rejected under Section 103(a) as being unpatentable over the '622 reference.

Applicant appreciates the indication of allowability of claims 4-7 and 12-14.

Claim 8 has been amended to correct an informality as indicated in the Office Action.

Applicant respectfully traverses the Section 102(b) rejection of claims 1, 2 and 8-10 because the Office Action failed to cite teaching or suggestion of elements that completely correspond to the all of the limitations in the rejected claims and, therefore, failed to establish a *prima facie* case of anticipation. Specifically, the Office Action has failed to point out how the cited portions of the '622 reference teach limitations including means for reducing DC-offset and

noise produced by an amplifier and feedback means for further reducing the DC-offset of the amplifier. While the '622 reference appears to be directed generally to controlling offset correction of a unity gain feedback amplifier (*see, e.g.*, column 1, lines 41-44), it is unclear how the cited portions of the '622 reference teach these claimed limitations of the present invention. For example, the Office Action has not cited teaching of how the transistor T1 of FIG. 1 of the '622 reference reduces noise and/or DC-offset produced by the amplifier 10. In addition, the Office Action has not cited teaching of how the transistor T3 and resistor R1 further reduce the DC-offset produced by the amplifier 10. Furthermore, Applicant has briefly reviewed the '622 reference and cannot ascertain any teaching of noise reduction.

In view of the above, Applicant submits that the Office Action has failed to establish a *prima facie* case of anticipation and requests that the Section 102(b) rejection be removed.

Applicant submits that the Section 103(a) rejection of claims 3 and 11 is improper because, as stated above, the Office Action failed to cite a portion of the '622 reference that completely corresponds to the claimed limitations of the claims from which claims 3 and 11 depend. Therefore, Applicant submits that further discussion of the Section 103(a) rejections is not necessary. Notwithstanding the above, Applicant further submits that the Section 103(a) rejection is improper because the Office Action failed establish a *prima facie* case of obviousness. First, the Office Action failed to cite any teaching or suggestion of limitations including a high frequency chopper. Instead, the Office Action alleges that such limitations "would have been obvious," without citing any teaching in support of the allegation. Second, Applicant submits that the Office Action failed to cite any evidence of motivation for modifying the '622 reference to include the claimed limitations of the present invention. Without such evidence of motivation, the motivation requirement of a Section 103(a) rejection has not been met. In this regard, the Office Action failed to either cite teaching or suggestion of the claimed limitations of the instant application or cite evidence of motivation for modifying the '622 reference; therefore, no *prima facie* case of obviousness has been established and the Section 103(a) rejection should be removed.

New claims 15-17 include limitations directed to other aspects of the invention. Applicant submits that no new subject matter has been added, as support for these limitations can be found in the Specification. For instance, FIGs. 2 and 3 and corresponding discussion thereof

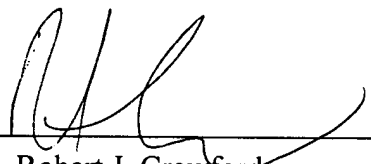
describe a feedback circuit that feeds an input of an amplifier with an output of a circuit including a chopper (*e.g.*, as would exemplify claims 15-16). In addition, page 1, line 25 through page 2, line 1 of the Specification discusses input and output choppers CHP_i and CHP_o in connection with FIG. 1 (*e.g.*, as would exemplify claim 17). The input chopper CHP_i alternately couples terminals of a differential input to input nodes of an amplifier, and the output chopper CHP_o alternately couples output nodes of the amplifier to output terminals of a differential output.

In view of the above, Applicant submits that each of the claims is in condition for allowance. Reconsideration and withdrawal of the rejections, along with a favorable response, are earnestly requested.

Please charge Deposit Account No. 50-0996 (PENA.022C1) in the amount of \$84.00 for additional independent claim 17.

Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is encouraged to contact the undersigned at 651/686-6633.

CRAWFORD PLLC
1270 Northland Drive, Suite 390
St. Paul, Minnesota 55120
(651) 686-6633

By: 
Name: Robert J. Crawford
Reg. No.: 32,122

APPENDIX OF MARKED-UP CHANGES TO THE CLAIMS

U.S. Patent Application Serial No. 09/826,571

8.(*Amended*) A circuit comprising: means for amplifying an input signal and producing a DC-offset and noise and for delivering an output signal to an output of the circuit; means, responsive to the [amplifier] amplifying means, for reducing the DC-offset and the noise produced by the [amplifier] amplifying means; and feedback means for further reducing the DC-offset produced by the [amplifier] amplifying means.